

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 056H17T5302

Catalog No: Y535

Black Max® Inverter Duty Speed Ratio Motor, 1 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 56C Frame, TENV



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord

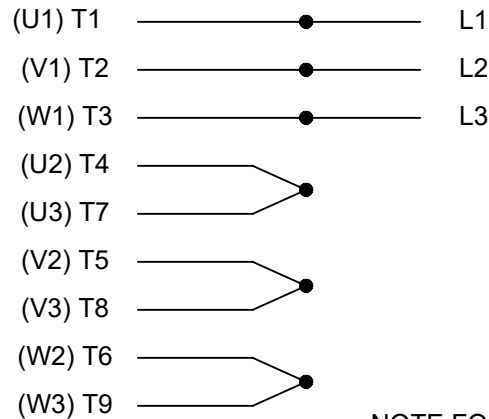
Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	60 Hz	Voltage	230/460 V
Current	3.0/1.5 A	Speed	1725 rpm
Service Factor	1	Phase	3
Efficiency	84 %	Power Factor	75
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	P
Frame	56C	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6203	Opp Drive End Bearing Size	6203
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	13.5 Ohms	Mounting	Bolt-on Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	NEMA 56	Overall Length	14.98 in
Frame Length	8.56 in	Shaft Diameter	0.625 in
Shaft Extension	2.06 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 1000:1		
Outline Drawing	B-108747-856	Connection Drawing	A-EE7308T

HIGH VOLTAGE



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE

THREE PHASE
DUAL VOLTAGE MOTOR

VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019

ECO DESCRIPTION
ADDED TERMINAL CONNECTION DIAGRAM

COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.
PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF
REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY
INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED,
BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED
TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT
AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL
BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN
RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

DRAWN BY
SMC

DATE
05-13-1992

APPROVED BY
TB

DATE
05-13-1992

REFERENCE
EE7308/EE7300

THIRD ANGLE
PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-INTERNAL
3 PHASE - DUAL VOLTAGE MOTOR

MATERIAL

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

EE7308T

SHEET
1 OF 1

CERTIFICATION DATA SHEET

Model#: 56H17T5302 E
 CONN. DIAGRAM: A-EE7308T
 OUTLINE: A-104043-856

WINDING#: ZT472 TR 3
 ASSEMBLY: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1	.75	1800	1725	56C	TENV	P	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	3/1.5	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 84	3/4 LOAD EFF: 82.5	1/2 LOAD EFF: 78.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 75	3/4 LOAD PF: 65.5	1/2 LOAD PF: 51	81.5	SQ CAGE INV DUTY	2 / 1

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3 LB-FT	30 / 15	10.8 LB-FT 360	15 LB-FT 500	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.11 LB-FT^2	0 LB-FT^2	0 SEC.	0	39 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
8.378	5.6232	10.7068	9.9116	278.036

RM	ZREF	XR	TD	TD0
11132.8	284	1.7	0.0071	0.136

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE OR ENCODER	BOLT-ON	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6203	6203	POLYREX EM	STANDARD 56	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 1000:1
 INV. HP SPEED RANGE: 2.0 X BASE SPEED

ENCODER: PROVISIONS ONLY
 NORTHSTAR ST56
 NONE NONE PPR

BRAKE: PROVISIONS ONLY NONE

*
N
O
T
E
S
*

STEARNS	P/N	NONE
56,000	NONE	
10 FT-LB	NONE V	NONE Hz

DATE: 06/28/2017 02:08:32 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 8/22/2017

Customer: _____

Attention: _____

Submitted by: VINAYAK YERATE



56H17T5302

Submittal

Data @ 460 V

Motor Load Data

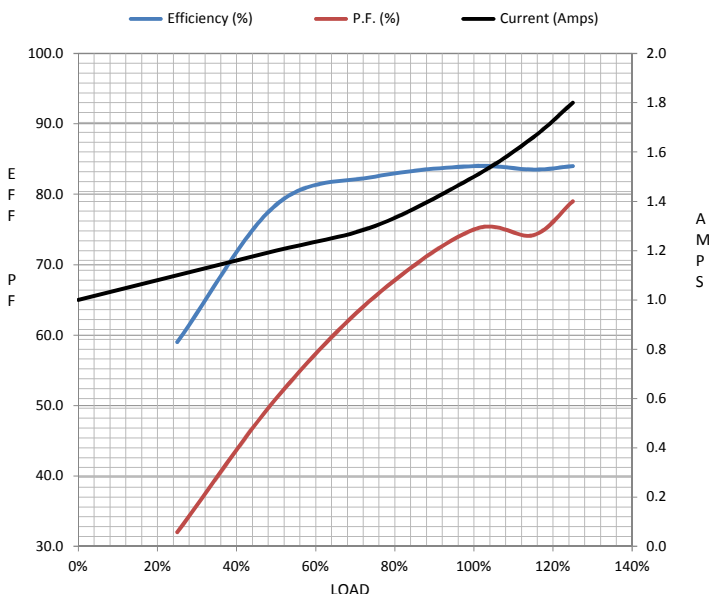
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.00	1.10	1.20	1.30	1.50	1.66	1.80	15.0	
Torque (ft-lb)	0.00	0.75	1.50	2.20	3.0	3.4	3.7	10.8	
RPM	1800	1788	1778	1765	1750	1,747	1740	0	
Efficiency (%)		59.0	78.5	82.5	84.0	83.5	84.0		
P.F. (%)	12.0	32.0	51.0	65.5	75.0	74.2	79.0	69.0	

Motor Speed Data

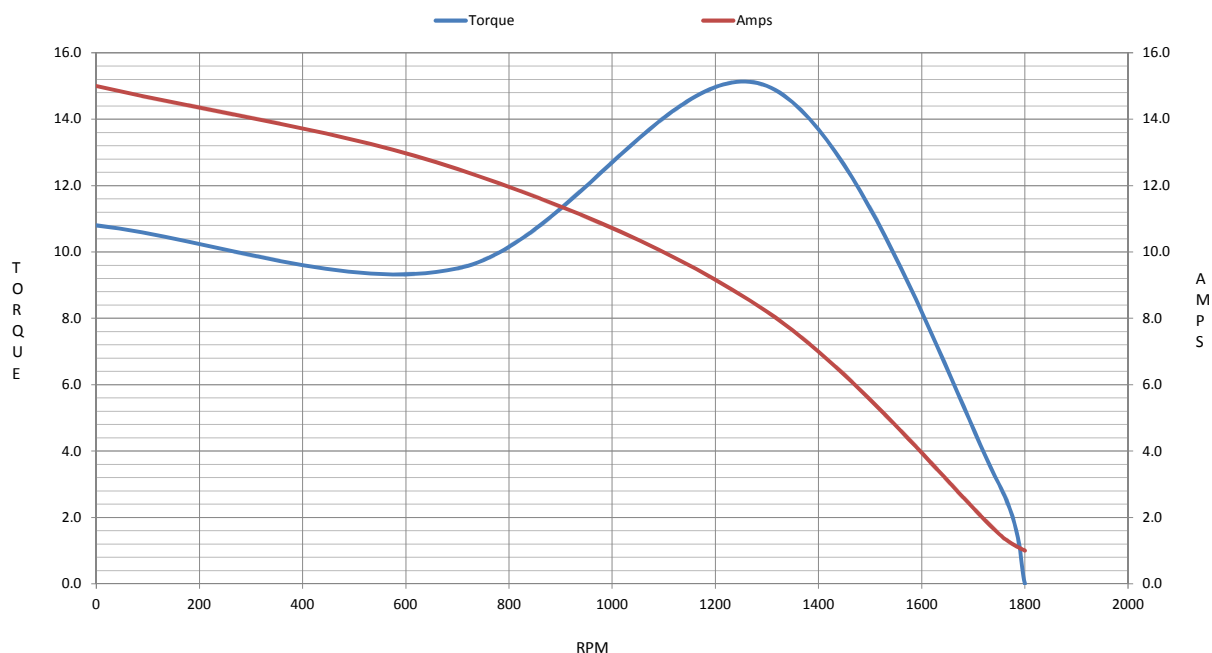
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1300	1750	1800
Current (Amps)	15.0	12.5	8.2	1.50	1.00
Torque (ft-lb)	10.8	9.5	15.0	3.0	0.00

Information Block

HP	1.0			
Sync. RPM	1800			
Frame	56			
Enclosure	TENV			
Construction	TTR			
Voltage	230/460	V		
Frequency	60	Hz		
Design	A			
LR Code letter	P			
Service Factor	1.15			
Temp Rise @ FL	65	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	0.11	Lb-Ft²		
Ref Wdg	ZT472 TR			
Sound Pressure @ 1M	62	dBA		
VFD Rating	CONSTANT 1000:1			
Outline Dwg	A-104043-856			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
8.3780	5.6230	10.7070	9.9120	278.0360



Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 056H17T5302

(Model No. may contain prefix and/or suffix characters)

Catalog No : Y535

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22